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(54) PROTOCOL HEADER CONSTRUCTION AND/OR REMOVAL FOR MESSAGES IN WIRELESS COMMUNICATIONS

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(57) **ABSTRACT**

A communications network includes a wireless core network that is coupled to a packet data network and/or a public circuit-switched network. The wireless core network includes wireless access systems that communicate over wireless links with mobile stations. The mobile stations are capable of participating in packet-switched communications session with another endpoint, such as one connected to the packet data network or the public circuit-switched network. To take advantage of existing channel coding and interleaving schemes, and to enhance spectral efficiency, protocol headers associated with packet-switched communications are not communicated with the bearer traffic (which can be voice or other forms of real-time traffic). The protocol headers are reconstructed at the receiving end, which may be the wireless access system or a mobile station. To enable the reconstruction of the protocol headers, configuration messages are exchanged between the mobile stations and the wireless access systems.